

Table showing for the month of September, &amp;c.—Continued.

States and stations.	Rainfall of 10 inches, or more, per month.		Rainfall of 2.50 inches, or more, in 24 hours.			Rainfall equaling or exceeding one inch per hour.			
	Year.	Amt.	Year.	Day.	Amt.	Year.	Day.	Time.	Amt.
<i>Texas—Continued.</i>									
Rio Grande City.....		Inches.	1887	21-22	2.55				
San Antonio.....			1881	11	3.09				
Do.....			1882	6	6.20				
Sour Lake.....			1882	15-16	6.10				
Do.....			1886	24	2.70				
Waco.....			1886	13	3.10				
Longview.....			1885	9	3.94				
<i>Utah.</i>									
Salt Lake City.....	1878	3.15							
<i>Vermont.</i>									
Brattleborough.....	1888	10.56	1888	18	2.51				
Charlotte.....			1885	10	2.50				
Manchester.....			1888	20-21	2.57				
Strafford.....			1881	2-3	2.50	1874	24	1 00	2.00
Do.....						1874	16	1 00	1.10
<i>Virginia.</i>									
Accotink.....			1877	12	2.50				
Bruntington.....			1886	9-10	3.50				
Cape Henry.....	1876	14.90	1887	29	2.60				
Do.....	1877	10.04							
Capeville.....	1876	10.70	1876	16-17	6.00				
Dale Enterprise.....	1882	12.24							
Lynchburg.....	1888	10.58	1871	15	3.42				
Mount Solon.....			1878	10-11	3.10				
Norfolk.....	1877	11.90	1873	9-10	3.12	1877	31	1 00	1.00
Do.....			1876	15-16	3.22				

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	Year.	Amt.	Year.	Day.	Amt.	Year.	Day.	Time.	Amt.
<i>Virginia—Continued.</i>									
Norfolk.....		Inches.	1882	25-26	4.22				
Do.....			1883	10-11	2.66				
Do.....			1885	21-22	2.78				
University of Virginia.....	1888	13.10							
Woodlawn.....			1877	11-12	3.50				
Wytheville.....			1878	12	7.02				
<i>Washington.</i>									
Neah Bay.....	1885	12.15							
<i>West Virginia.</i>									
Wellsburg.....			1883	20	4.50	1883	20	2 15	4.50
Wheeling.....			1886	28	2.75				
Morgantown.....	1882	7.23							
<i>Wisconsin.</i>									
Beloit.....			1875	8-9	6.10				
Do.....			1880	18-19	2.82				
Bloomfield.....			1875	8-9	4.85				
Embarras.....	1881	11.60							
Green Bay.....			1888	16-17	3.98				
La Crosse.....	1881	10.87	1875	31	2.74				
Do.....	1884	10.01	1876	9	2.81				
Do.....			1884	6	5.69				
Lincoln.....			1888	16	4.00				
Milwaukee.....			1872	22-23	3.74				
Neilsville.....	1881	14.01	1880	18	3.90				
Do.....			1881	29	3.70				
<i>Wyoming.</i>									
Fort Fetterman.....	1881	4.20		5	2.60				

## WINDS.

The prevailing winds for September, 1888, are shown on chart ii by arrows flying with the wind. Along the Atlantic coast south of New England, and in the Gulf states and lower and middle Mississippi valleys, northerly winds were most frequently noted; along the Saint Lawrence Valley and over the Lake region they were mostly westerly; in the Missouri Valley, northwest; in the Rocky Mountain regions, variable; and along the Pacific coast, north to west.

## HIGH WINDS.

No velocities of fifty miles or more per hour have been reported, other than those given in the table of miscellaneous meteorological data, except at Mount Washington, N. H., 80, sw., 8th, and 86, sw., 13th.

## LOCAL STORMS.

The severe storms in the south Atlantic and east Gulf states during the first decade of the month, and the heavy gales along the middle Atlantic and New England coasts on the 25th and 26th, attended the passage of barometric depressions described in this REVIEW. The following reports refer to storms of a more local character:

**8th. Illinois.**—Quincy: a severe rain and wind storm in the evening did much damage. Houses were unroofed and trees damaged. The storm lasted about ten minutes and was unusually destructive.

**10th. Virginia.**—Norfolk: a destructive wind and rain storm swept over parts of Nansemond, Isle of Wight, and Southampton counties this morning, destroying trees and crops and demolishing buildings.

**14th. Maryland.**—Westport, Prince George Co.: this section was visited in the afternoon by a cyclonic storm about one-fourth of a mile in width which caused much damage.

**14-15th. California.**—San Francisco: heavy showers of rain, accompanied by thunder and lightning, prevailed.

**15th. South Carolina.**—Tumbling Shoals, Laurens Co.: a tornado swept over this place at 6 p. m., doing much damage to trees. Toney Creek, Anderson Co.: about 5 p. m. a tornado passed across Saluda River one mile south of this place, unroofing houses.

**16th. District of Columbia.**—Washington City: the thunder-storm which occurred in the afternoon was accompanied by high wind and excessive rain; 1.23 inches of rain fell in twenty-

five minutes; several houses in the southern portion of the city were unroofed or otherwise damaged. **New Jersey.**—Hurffville, Gloucester Co.: a storm visited this place between 7 and 8 p. m., doing much damage to houses, crops, and stock.

**17th. Delaware.**—Viola, Kent Co.: a destructive storm passed over this county from southwest to northeast; it lasted only about two minutes, but did considerable damage.

**20th. Kansas.**—Dodge City: occasional flashes of lightning were observed at sunset; at 8.05 p. m. the wind backed from northeast to northwest and for twelve minutes blew at the rate of forty miles an hour; hail of unusual size fell from 8.15 to 8.40 p. m., causing much damage; the storm ended at 9.10 p. m. **Virginia.**—Lynchburg: a storm passed over Orange county, destroying houses, trees, and stock.

**21st. South Carolina.**—Tabernacle, Marion Co.: a tornado passed over this place at 6.30 p. m., velocity of wind sixty-five miles an hour from the east; storm lasted from three to five minutes; width of track about three hundred yards. **Texas.**—Mammoth Springs, Fulton Co.: a tornado passed over this place to-day; seven houses were wrecked; trees and crops badly damaged, and several people were injured.

**26th.** Heavy gales and rain storms prevailed over New England, more especially along the coast, where considerable damage was done to shipping and property.

Destructive hail storms were reported as follows:

**7th. Minnesota.**—Saint Paul: during a thunder-storm in the afternoon hail of unusual size fell to a depth of one-half inch.

**12th. New York.**—Nyack: a severe hail storm occurred in the interior of Rockland county at night; hail-stones the size of walnuts fell. **Pennsylvania.**—Johnstown, Cambridge Co.: a severe thunder and hail storm occurred in the evening; hail fell in large quantities and was very destructive to window-glass, grapes, and late vegetables; in protected places it remained on the ground twenty-four hours. Several buildings were struck by lightning. **Washington, Washington Co.:** a destructive hail storm occurred at 6 p. m.

**20th. Kansas.**—Dodge City: hail of unusual size fell from 8.15 to 8.40 p. m. during a thunder storm.

**27th. New York.**—Eden Centre: a very severe hail storm, accompanied by thunder and lightning, passed over this place from the southwest. The stones were about the size of chest-nuts; the storm lasted one hour.